



Delta1 Series

EXPOSED FOLDED VHF UHF

DIPOLE 2-Bay Array

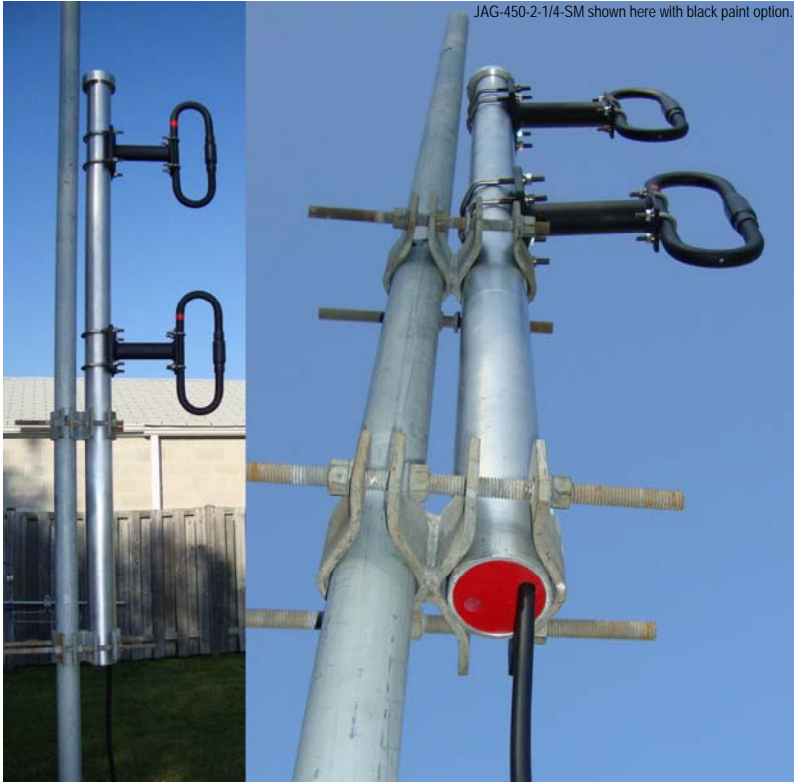
406-512 MHz



Electromagnetics

"Quality is everything."

JAG-450-2-1/4-SM



JAG-450-2-1/4-SM shown here with black paint option.



- Civil aviation applications
- Land mobile networks
- Public security and safety
- Transportation networks



JAG-450-2-1/4-SM Product Specification Sheet.

Electrical Specifications		Mechanical Specifications		Environmental	
Model	JAG-450-2-1/4-SM	Model	JAG-450-2-1/4-SM	Model	JAG-450-2-1/4-SM
Frequency Range (MHz)	406 – 512	Height	inches (mm) 60 (1,524)	Survival Wind Velocity With no Ice	mph (km/h) 175 (282)
Bandwidth @ 1.5:1 VSWR or Better (MHz)	106	Width	inches (mm) 8 (203.2)	Survival Wind Velocity With Ice	mph (km/h) 110 (177)
Polarization	Vertical	Depth	inches (mm) 4.25 (108)	Maximum Allowable Radial Ice Buildup	inches (mm) 0.5 (12.7)
Radiation Pattern	Offset	Weight	lb (kg) 10 (4.5)	Equivalent Flat Plate Area	ft <sup>2</sup> (m <sup>2</sup> ) 0.96 (0.09)
Nominal Gain (dBd)	3.7 – 4.2	Support Mast Outside Diameter Inches (mm)	2.375 (60.3)	Lateral thrust (100mph) 0 Radial Ice Buildup	lbs (N) 38.5 (171.3)
Nominal Horizontal 3dB Beamwidth (Deg)	205 – 215	Support Mast Allowable Clamping Space Inches (mm)	24 (609.6)	Torsional moment (100mph) 0 Radial Ice Buildup	ft-lbs (Nm) 11 (14.9)
Nominal Vertical 3dB Beamwidth (Deg)	33 – 35	Mounting Information	No clamps supplied* *(See JAG clamps page for suitable clamps)	Bending moment (100mph) 0 Radial Ice Buildup	ft-lbs (Nm) 76.5 (103.3)
Maximum Average Power (Watts)	200	Pigtail (ft) & RF Connector	2 – 2.5 & 'N' Male		
Lightning Protection	DC Ground				

Specifications are subject to change without notice. As a result, all information contained in the present datasheet is subject to confirmation at time of ordering.

Dated: February-15-2011

Issue: 1

Made in Canada

Rev021511.1

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Features

- 2-year factory warranty (See page 3)
- Broadband (106 MHz)
- Suitable for multi-frequency systems
- Soldered internal joints
- Small for easy transport and installation
- Fits in standard Otis Elevators
- DC Grounded
- Stainless steel hardware
- Easy storage
- Low PIM
- Operation in harsh environments
- Optional lightning rod spike
- Optional downtilt versions
- Optional inverted mountable model
- Side or tower top mountable
- Optional coatings such as black paint
- Courier shippable
- Ideal for monitoring stations

Description

The JAG-450-2-1/4-SM is a 2-bay version of the JAG-450-1-1/4, incorporating all the features of the basic model into a medium gain antenna needed in certain system applications. The JAG-450-2-1/4-SM is supplied with either quarter-wave (JAG-450-2-1/4-SM) or half-wave (JAG-450-2-1/2-SM) dipole-to-mast spacing. Site-specific mounting hardware is required with these antennas. Please consult JAG for suitable clamps.

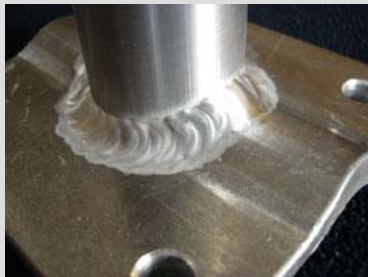
The JAG-450-2-1/4-SM offers a short mast design (only five feet in length) to facilitate easy transport, rooftop access, and installation resulting in a cost effective antenna for urban sites.

As a result of the antennas 5-foot compact design, it is shippable by most courier companies such as FedEx or UPS. This is much more convenient than traditional freight shipping required for comparable antennas.

The JAG-450-2-1/4-SM, with its rugged construction, lightweight and ease of installation, is ideal for leased or rented system use. Its bandwidth also makes it perfect to stock for re-use or re-sale.



JAG-450-2-1/4-SM at a glance



Expert TIG welding



Natural rubber plugs



Heavy-duty dipole fixture



Optional lightning rod

\*Site-specific mounting hardware is necessary with these antennas. Please consult JAG to determine suitable clamps for your application.

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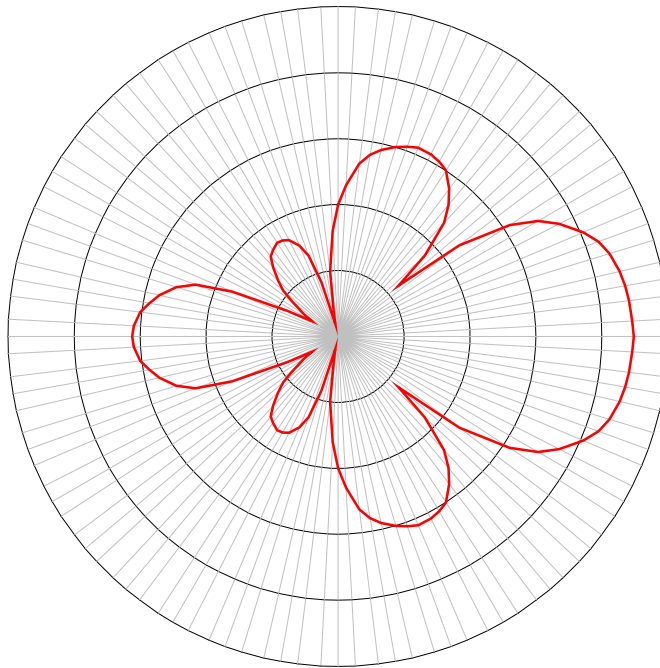
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JAG-450-2-1/4-SM

Vertical Radiation Pattern For Vertical Polarization



Elevation

— Quarter Wave Spacing

\* This is a general representation of the Delta0 Series JAG-450-2-1/4-SM antenna radiation pattern. For the latest detailed pattern contact JAG Applications Engineering.

WARRANTY

JAG Electromagnetics warrants all its products against defects in material or workmanship and is only applicable if failure results from these factors within two years from the purchase date by the user.

JAG Electromagnetics will not be liable for any incidental or consequential damages due to failure of a JAG product under this warranty or any implied warranty.

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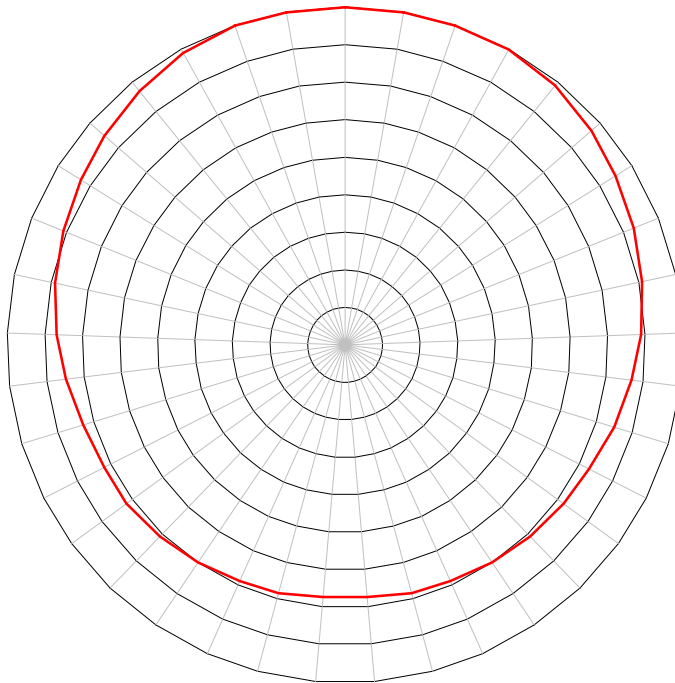
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JAG-450-2-1/4-SM

Horizontal Pattern For Vertical Polarization



Azimuth

— Quarter Wave Spacing

\* This is a general representation of the Delta0 Series JAG-450-2-1/4-SM antenna radiation pattern. For the latest detailed pattern contact JAG Applications Engineering.

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